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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,674	01/04/2002	Wolfgang Kroeber	AZ.2825	9113

30996 7590 09/04/2003

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EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,674

Applicant(s)

KROEBER, WOLFGANG

Examiner

Charles A. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-18, 20, 21, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 19, 22-24 and 27-33 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14-18,20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi in view of Dimock. In regards to claims 14 and 15 Kishi US 5,437,777 teaches an apparatus for treating substrates comprising:

a first process container (3) provided with at least one opening (5) in a vertical wall of said first container;

wherein said first container is closable from outside via a substrate (1);

a second process container (not numbered) disposed adjacent to said first container;

wherein said wall with opening is common to both containers.

Kishi does not teach a closure means for the opening located inside the first container.

Dimock US 4,523,985 teaches an apparatus for processing a wafer comprising:

a wafer chuck assembly (105) that seals against a process chamber by rim member (127);

wherein said process chamber (12) is sealed from the inside by sealing member (15) when said chamber is not processing a wafer.

It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the apparatus taught by Kishi with a sealing arrangement as taught

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by Dimock in order to maintain the process chamber at a specified pressure while changing out the wafers to be processed, thereby saving cycle time by not having to evacuate the process chamber for each wafer.

In regards to claims 16 and 17 Kishi further teaches a sealing element that forms a lip with an undercut around said opening (5) in said first wall. See figure 5.

In regards to claim 18 Kishi also teaches contact elements (20) being provided to establish an electrical contact with the surface of the wafer being processed.

In regards to claim 20 Kishi further teaches providing an electrode (21) across from said opening in the first container.

In regards to claim 25 Kishi also teaches that at least one treatment fluid is introducible into the said first container, wherein said fluid contains AU electrolytes for coating the wafer.

In regards to claim 26 Kishi teaches a chamber (18) attached to his apparatus for drying the wafer after vapor deposition.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi and Dimock as applied to claim 20 above, and further in view of Jorné et al. Kishi and Dimock teach the limitations of claim 20 as above, they do not teach the anode as having hole through which at least one fluid passes. Jorné et al. teach a distributor (21) for electrolytes that is porous. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Kishi and Dimock with a porous anode as taught by Jorné et al. in order to control the deposition of electrolyte onto the wafer.

R s p o n s t o A m e n d m e n t

The amendments filed on September 14, 2001 and January 2, 2002 have been entered into the record.

Allowable Subject Matter

Claims 19,22-24 and 27-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 19 has the limitation of the contact element extending into the undercut. This structural limitation is not taught or suggested by the closest prior art of Kishi. Claim 22 has the limitation of an electrode being used to seal the hole in said first container. This limitation is not taught or suggested in any of the cited prior art. Claims 23 and 24 which depend from claim 22 will be in condition for allowance once claim 22 is placed into condition for allowance.

Claim 27 provides for a structure of a wafer holder that is not suggested or taught by the closest prior art of Kishi or Dimock. Claims 28-33 which depend from claim 27 will be in condition for allowance once claim 27 is placed into condition for allowance.

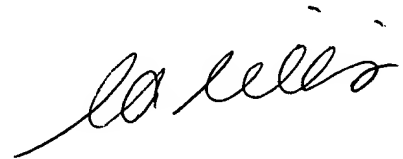
The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure is: Ting et al. 2000, Adams 2000 and Toda et al. 2002.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday, Tuesday, Thursday and Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

CAF
August 7, 2003
CAF 8-7-03